Preface

Natural Resources Conservation Service (NRCS)

In 1999, the Natural Resources Conservation Services (NRCS) Watershed Science and Wildlife Habitat Management Institutes developed a comprehensive watershed scale wildlife habitat planning tool to be incorporated into the National Biology Handbook (*The Handbook*). While *The Handbook* presents sound ecological principles and methodologies, application of this technology for wildlife conservation at a watershed scale on private property is relatively sparse.

The NRCS is the United States Department of Agriculture (USDA) agency charged with providing assistance to private landowners and communities who voluntarily participate in conservation programs. The NRCS actively promotes conservation corridor planning for wildlife at a watershed scale. However, it recognizes that the long-term wildlife conservation value of corridors is highly dependent on the health of the adjacent landscape and large patches of native vegetation. Implementing successful watershed scale wildlife conservation projects requires the cooperation of private landowners, local governments, private non-profit conservation organizations, and state and federal agencies working at both the watershed and site-specific scale. Partnerships and cooperation among many of those committed to land, water, and wildlife conservation are already a reality in the Henry's Fork watershed. The key to success of present and future wildlife conservation efforts will be a vision shared by farmers, ranchers, developers, and communities willing to support and participate in conservation projects.

This case study has been prepared for NRCS field office personnel and their partners in wildlife conservation. It is primarily directed at assisting those involved in watershed scale wildlife corridor planning projects in agriculturally dominated landscapes like the lower Henry's Fork. All aspects of the case study are tiered to the methodology and principles detailed in *The Handbook*.

Craig Johnson

Background

Natural Resources Conservation Service (NRCS)


Craig Johnson

To add examples of implementation, the Henry's Fork watershed of the Snake River in southeastern Idaho was selected as a case study site. Specifically, a 40-mile reach of the lower Henry's Fork and its immediate watershed downstream from the confluence of the Warm River were identified for study. This reach of river flows through privately owned ranch land and productive winter wheat, barley, and potato farms. The river is important to the region's agricultural and tourist-based economies–a source of irrigation water, scenic quality, and a world-renowned fishery. Trumpeter swans, bald eagles, osprey, waterfowl, mule deer, whitetail deer, moose, and a diversity of other species inhabit this reach of the river.


Craig Johnson

Like many watersheds with few residents, breathtaking scenery, world-class fishing, and other recreational opportunities, the Henry's Fork is experiencing increased development pressure. Consequently, property values in the Henry's Fork Corridor and its tributaries are rapidly rising. At the same time, agriculture in the region is in economic decline. Increasing numbers of farmers and ranchers are considering the option of selling all or portions of their property to developers.


Craig Johnson

The environmental consequence of this change in land-use patterns is fragmentation--the breaking up of large patches of native vegetation (more recently agricultural and rangeland) into smaller, increasingly isolated patches. At risk are the fish and wildlife heritage, scenic quality, recreational opportunities, and rural life style of the region. Habitat fragmentation diminishes capacity of the Henry's Fork watersheds to sustain healthy wildlife populations or metapopulations in five ways:

- Loss of original habitat
- Reduced habitat patch size
- Increased edge
- Increased isolation of patches
- Modification of natural disturbance regimes


Hank Henry

Conservation of open space, agricultural resources, and fish and wildlife habitat in the Henry's Fork agricultural corridor has been the focus of several non-profit organizations and government agencies for many years. The Teton Regional Land Trust (TRLT) is the leader in a partnership with The Nature Conservancy (TNC), Henry's Fork Foundation (HFF), NRCS, Idaho Department of Fish and Game (IDFG), and the Bureau of Land Management (BLM) in pursuing an Agricultural Corridor Initiative (collectively, the Henry's Fork Ag Corridors Working Groups). The Henry's Fork Watershed Council (the Council), which has endorsed the working group, provides an important forum for all interested in the watershed and its future. The Council is a vital community-based network that facilitates communication, cooperative projects, and research related to the health of the watershed.

Dick Rol

The TRLT and partners have defined a specific goal for their Henry's Fork Agricultural Corridor Project:

"We are prioritizing areas in need of protection and working with landowners, agencies, and local representatives to protect valuable agricultural and natural resources in Fremont and Madison Counties. The areas we are targeting include stream corridors and farmlands that support waterfowl flyways and wildlife migration corridors, cottonwood forests, open space, and a high quality, scenic recreational experience" (TRLT, 2001).

Craig Johnson, Richard Toth, UDWR